

## MINUTES OF THE ANNUAL MEETING.

### FIRST SESSION.

The Fourteenth Annual Meeting of the Entomological Society of America was opened in Soldan High School, St. Louis, Missouri, at 2:00 P. M., Monday, December 29, 1919, with Vice-President J. W. Folsom in the chair. On motion from the floor, C. L. Metcalf was elected Secretary *pro tem*. The following Committees were appointed by the chair:

*Committee on Nominations:* RAYMOND C. OSBURN, T. D. A. COCKERELL, and WM. A. RILEY.

*Auditing Committee:* SEYMOUR HADWEN, C. H. TURNER and J. L. KING.

The Chair appointed ARTHUR GIBSON and GEO. A. DEAN to fill vacancies on the Executive Committee.

This session was devoted to the reading of the following papers:

- Tropisms in Insect Behavior—An Inquiry.....C. H. TURNER  
The Food Plants and Distribution of Certain Calandra Species...  
A. F. SATTERTHWAIT  
The Biology of the Carabid Genera *Brachynus*, *Galerita* and  
*Chlænus*.....J. L. KING  
Insects of the Between-Tide Zone of the North Carolina Coast....  
Z. P. METCALF and HERBERT OSBORN  
Observations on Canadian Ticks.....SEYMOUR HADWEN  
Notes on the Mouth-parts of *Aradidæ*.....C. S. SPOONER  
The Genitalia of the *Syrphidæ*.....C. L. METCALF  
Observations on the Genitalia of *Lachnosterna*.....  
WM. P. HAYS and J. W. MCCOLLOCH  
Notes on the Leafhoppers of the Subfamily *Gyponinæ*.....E. D. BALL  
The Production of Abnormal Larvæ, Pupæ, and Adult Beetles by  
Gas Secreted by the Confused Flour Beetle (*Tribolium confusum*).....R. N. CHAPMAN

## SECOND SESSION.

TUESDAY, DECEMBER 30, 10:00 A. M.

The Society was called to order by the President, J. G. Needham, in Soldan High School at 10:00 A. M. This session was devoted to a Symposium on "The Life Cycle in Insects."

## Scope:

1. Facts as to form changes, broods, length of life, moults.
2. Significance of facts in relation to nature of environment, reproductive capacity, rate and times of growth, habits, etc. Briefest possible statement of what each group best illustrates in relation to the life cycle.

## Presentation by groups, as follows:

1. Apterygote Insects. . . . . J. W. FOLSOM
2. Orthopteroids (sens. lat.) . . . . . E. M. WALKER
3. Hemiptera (excl. 4) . . . . . E. D. BALL
4. Aphids and Coccids. . . . . EDITH M. PATCH
5. Neuropteroids having complete metamorphosis, and Lepidoptera. . . . . S. L. FRACKER
6. Coleoptera (incl. Strepsiptera) . . . . . R. N. CHAPMAN
7. Diptera. . . . . C. L. METCALF
8. Hymenoptera. . . . . T. D. A. COCKERELL
- Concluding Discussion. . . . . S. A. FORBES

## THIRD SESSION.

TUESDAY, DECEMBER 30, 2:00 P. M.

The Society was called to order in business session in Soldan High School by President Jas. G. Needham.

Dr. F. E. Lutz moved that it is the sense of the Society that it be desirable to have the papers on the Life Cycle in Insects published in one number of the ANNALS. Motion carried.

Motion was passed to hear the papers remaining on the program before the business session. The following papers were heard:

- The Influence of Environmental Factors in the Hatching of the Eggs of *Aphis prunifoliae* Fitch. . . . . ALVAH PETERSON
- Serum Diagnosis and Insect Relationships. . . . .
- ROBT. D. GLASGOW and JOSEPHINE BURNS GLASGOW

The Executive Committee presented the reports of the Secretary, Treasurer, Editor of ANNALS, and Treasurer of the Thomas Say Foundation, as follows:

REPORT OF THE SECRETARY.

*Membership.*—The following members have died since the last Report:

EMERSON LISCUM DIVEN, killed by the fall of an aeroplane while engaged in government work.  
 V. A. E. DAECKE.  
 O. S. WESTCOTT.  
 F. H. WOLLY-DOD, died in army service in the Balkans.  
 Total, 4.

The following have resigned:

DR. JAS. F. ABBOTT.	MAURICE E. HAYS.
GEO. F. ARNOLD.	WM. KAYSER.
W. B. BARROWS.	ALICE A. NOYES.
R. P. DOW.	F. X. WILLIAMS.
S. W. FOSTER.	
Total, 9.	
For non-payment of dues, 17 members were dropped.	
Total losses, 30.	

On September 20th, the following were elected to membership by the Executive Committee:

HAROLD M. BOWER.	STANLEY R. McLANE.
P. W. CLAASEN.	H. RAYMOND PAINTER.
F. C. CRAIGHEAD.	I. L. RESSLER.
JOS. J. E. GILLET.	BENJ. G. THOMPSON.
ARTHUR FRANK.	COLBRAN J. WAINWRIGHT.
Total, 10.	

On December 29th the Executive Committee elected the following:

GEO. H. BRADLEY.	ROBT. L. KING.
WM. C. COOK.	FLOYD LAMBERT.
R. A. CUSHMAN.	RICHARD N. LOBDELL.
A. G. DIMOND.	STEWART LOCKWOOD.
HERBERT L. DOZIER.	PHILIP R. LOWRY.
MARVIN DUNN.	ENOCH A. McMAHON.
ALFRED E. EMERSON.	H. H. NININGER.
ROBT. K. FLETCHER.	R. H. PAINTER.
LAURA FLORENCE.	H. T. SEIFERT.
PERRY A. GLICK.	MARION R. SMITH.
WM. P. HAYES.	WM. SCHAUS.
CHAS. C. HILL.	HERBERT SPENCER.
HARRY A. HORTON.	J. R. STEAR.
Total, 26.	

Total additions, 36. Net gain in membership, 6.

*War Service and Remission of Dues.*—In accordance with the resolution passed at the last Annual Meeting, the Secretary has endeavored to procure a definite statement from each member who was in naval or military service of the United States and Allies, and has credited, subject to the approval of the Executive Committee, an amount of dues covering the period of service, with a minimum of one year. The following have made statements and received credit (in the absence of definite instructions on the point, the Secretary has taken the date of the armistice as the termination of the period of remission):

J. W. BAILEY.	NEALE F. HOWARD.
J. P. BAUMBERGER.	L. O. JACKSON.
F. H. BENJAMIN.	J. L. KING.
L. L. BUCHANAN.	H. H. KNIGHT.
R. T. COTTON.	W. H. LARRIMER.
HOWARD CURRAN (Canadian).	C. E. MICKEL.
D. M. DELONG.	MARTIN E. MOSELY (British).
E. L. DIVEN.	PHILIP A. MUNZ.
JAS. C. EVENDEN.	GEO. B. NEWMAN.
JOHN R. EYER.	J. SPEED ROGERS.
HARRY L. FACKLER.	G. J. SPENCER (Canadian).
F. A. FENTON.	E. H. STRICKLAND (Canadian).
THEODORE H. FRISON.	JOHN N. SUMMERS.
RICHARD T. GARNETT.	J. B. G. TULLOCH (British).
EDMUND H. GIBSON.	D. L. VAN DINE.
MAURICE E. HAYS.	CHAS. A. WEIGEL.
MORGAN HEBARD.	R. C. WILLIAMS, JR.
WALTER N. HESS.	WM. C. WOODS.
J. D. HOOD.	

A total of 37 individuals, representing  $49\frac{1}{4}$  years service. \$98.50 in all has been remitted in dues.

There are a few more to hear from.

Regarding payment of dues, the members were in the following classes on December 22d:

Paid for 1919.....	425
Owing one year.....	55
Owing more than one year.....	68
New members not yet paid.....	36
Life members.....	11
Honorary Fellows.....	6
Total membership.....	601

Four life memberships have been taken since the last report: By E. D. Ball, G. C. Crampton, J. F. Illingworth and J. Bequaert.

Respectfully submitted,

J. M. ALDRICH, *Secretary*.

December 22, 1919.

## TREASURER'S REPORT.

December 17, 1919.

## RECEIPTS.

Balance Dec. 23, 1918 (Annals, Mar., 1918, p. 60).....	\$1,173.99
Dues of Members.....	930.00
From Managing Editor of Annals.....	395.77
Interest on Current Account.....	16.60
Interest on Permanent Funds.....	28.27
One Life Membership in cash.....	50.00
Exchange.....	.06
Total.....	<u>\$2,594.69</u>

## DISBURSEMENTS.

Annals for 1918—March.....	\$302.50
June.....	296.00
September.....	244.00
December.....	325.00
Engraving for Annals.....	53.17
Postage and envelopes, Annals.....	35.20
Clerical help, Annals.....	18.45
Stamps and stamped envelopes, Secretary.....	23.00
Printing, Secretary.....	20.58
Clerical help, Secretary.....	35.00
Telegrams, two, in arranging symposium.....	2.00
One War Savings Stamp.....	4.23
Balance, cash in Commercial Nat'l Bank, Washington.....	\$1,211.40
In Fowler Nat'l Bank, Lafayette, Ind.....	24.16
	<u>1,235.56</u>
	<u>\$2,594.69</u>

NOTE.—The one War Savings Stamp was purchased with \$2.00 interest on Permanent Fund, plus \$2.23 of the balance of \$2.74 of Permanent Fund which was carried over uninvested at last report. The balance, 51 cents, of this uninvested item, is still carried in our bank balance above, as is also one Life Membership which belongs to the Permanent Fund, but was received so recently that the matter of its investment was left to the Executive Committee at the present meeting.

## CONDITION OF PERMANENT FUNDS.

On hand last report (Annals, March, p. 60).....	\$586.58
E. D. Ball, life membership.....	50.00
G. C. Crampton, life membership.....	50.00
J. F. Illingworth, life membership.....	50.00
J. Bequaert, life membership.....	50.00
One War Savings Stamp (see note under Disbursements).....	4.23
Appreciation of 10 War Savings Stamps.....	1.20
Interest.....	28.87
Total.....	<u>\$820.88</u>
Less interest transferred to current fund.....	26.87
Present balance.....	<u>\$794.01</u>

## SECURITIES HELD.

Bonds reported last year.....	\$550.00
10 War Savings Stamps, present value.....	43.50
U. S. Bond, No. 9,938,349.....	50.00
U. S. Bond, No. 1,747,437.....	50.00
U. S. Bond, No. 14,145,890.....	50.00
Cash balance, carried in current fund.....	50.51
Total.....	\$794.01

Respectfully submitted,

J. M. ALDRICH, *Treasurer.*

Washington, Dec. 17, 1919.

## REPORT OF THE MANAGING EDITOR.

It will very likely be taken for granted that in the publication of the ANNALS we have had to meet some of the difficulties and discouragements that seem to have troubled most of the enterprises of the year. It will not be necessary to detail them here but we trust that those who have been inconvenienced by delays or errors will accord the charity that is granted other delinquents. In spite of unfavorable conditions our subscription list has been well maintained, a number of back volumes have been sold and a number of authors have very generously assisted in the expense of providing illustrations for their papers.

Our expenses have been kept at the lowest point possible with due regard to creditable publication and we have been fortunate in continuing contracts for printing with but slight advances in certain details. However, a readjustment involving an advance to cover higher cost of paper will have to be met the coming year.

Receipts of the office have amounted to \$422.70, of which \$398.77 have been turned over to the Secretary-Treasurer, the balance being used for minor items of expense indicated in the following summary:

## RECEIPTS.

Subscriptions.....	\$259.00
Sale of back volumes.....	117.75
Reprints and engravings.....	45.95
Total.....	\$422.70

## DISBURSEMENTS.

Stamps and postal deposits.....	\$ 17.43
Labor.....	2.50
Refund on double subscription.....	4.00
By balance paid to Treasurer.....	398.77
Total.....	\$422.70

I believe we may feel proud of the character of articles published during the year and there is in hand a supply of excellent material for the coming year. If we are to enlarge the ANNALS to take care of the desirable papers offered we will need a larger income and this must be sought in a larger membership, an advance in membership and sub-



scription rates or in a larger sale of back volumes of which we have still a fair reserve. It is certainly desirable to maintain as wide a circulation as possible and while the price of the ANNALS is low compared with other journals it may be best to attempt to carry it forward another year or two, at least, at the old rates. A very decided help would be given if members would fill out their sets of back volumes or assist in placing sets in libraries which have not a complete series.

Respectfully submitted,

HERBERT OSBORN, *Managing Editor.*

The Executive Committee reported that they had made the following appointments:

*Thomas Say Foundation*, three years: NATHAN BANKS and A. D. MACGILLIVRAY; two years, C. GORDON HEWITT and WM. T. DAVIS.

*Editorial Board*: S. A. FORBES, A. D. HOPKINS and A. L. LOVETT.

The Auditing Committee reported as follows, and on motion the report was accepted:

The Auditing Committee have examined the books of the Editor of the ANNALS of the Entomological Society of America and the Treasurer of the Thomas Say Foundation and have found the same correct.

S. HADWEN,  
C. H. TURNER,  
J. L. KING,

*Committee.*

In the absence of the Secretary-Treasurer, his books were audited by a special committee of the Society in Washington, D. C., who made the following report, which was accepted:

Your Committee has examined the records and vouchers reported by the Secretary-Treasurer, J. M. Aldrich, and find the same to be correct and properly kept.

H. S. BARBER,  
A. N. CAUDELL,

*Committee.*

The Committee on Entomology in the National Museum presented a report, and following a discussion the report was accepted with the adoption of the following motion:

*Moved*, That this Committee be empowered to combine its report with that of the Museum Committee of the American Association of Economic Entomologists; that an abbreviated report based on the two separate reports be printed for publicity purposes, half of the expense to be borne by the Entomological Society of America; that the National Research Council be informed of the needs of the National Museum and their consideration and support be urged.

The combined report is printed at the end of these minutes.

The Nominating Committee submitted the following nominations:

*President*—L. O. HOWARD.

*First Vice-President*—F. E. LUTZ.

*Second Vice-President*—EDITH M. PATCH.

*Secretary-Treasurer*—J. M. ALDRICH.

*Additional Members Executive Committee*—W. S. MARSHALL, G. A. DEAN, J. W. FOLSOM, G. W. HERRICK.

*Committee on Nomenclature*—E. P. FELT, T. D. A. COCKERELL, NATHAN BANKS.

*Committee on Entomology in the National Museum*—C. W. JOHNSON, HERBERT OSBORN, WM. BARNES, W. M. WHEELER, J. G. NEEDHAM.

On motion the Secretary was instructed to cast the ballot of the Society for the candidates nominated. This being done, they were declared duly elected.

---

#### FOURTH SESSION.

8:00 P. M. The Society was called to order by President Needham, who introduced Dr. Wm. J. Holland, Director of the Carnegie Institute. Doctor Holland gave the Annual Address upon the subject "The Evolution of Entomological Science in North America." The address is printed in this number of the ANNALS.

The Society then adjourned.

C. L. METCALF.  
*Secretary pro tem.*